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ABSTRACT

This guide is one part of a set of materials designed to support an ecological intervention system for families and their special needs children between birth and three. The system is constructed on four premises: (1) intervention is guided by the family; (2) parent-child interactions are the heart of early intervention; (3) family rituals, daily routines, and play reflect the patterns of family life and are the medium into which intervention is embedded; and (4) recorded ongoing observations and conversations between parents and interventionists are the basis for intervention decisions. The materials respond to the importance of multiple environmental influences on child and family life, the power and influence of interactions between parent and child, and the rights of families to fully guide the course and shape the content of the intervention program. The system is appropriate for early intervention, Head Start programs, day care centers, migrant programs, family resource centers, hospital personnel working with infants and premature babies, and others. The guide describes the research and literature foundation relating to each of the four premises and introduces the parts of the "Growing: Birth to Three" system. (Contains 60 references.) (JDD)

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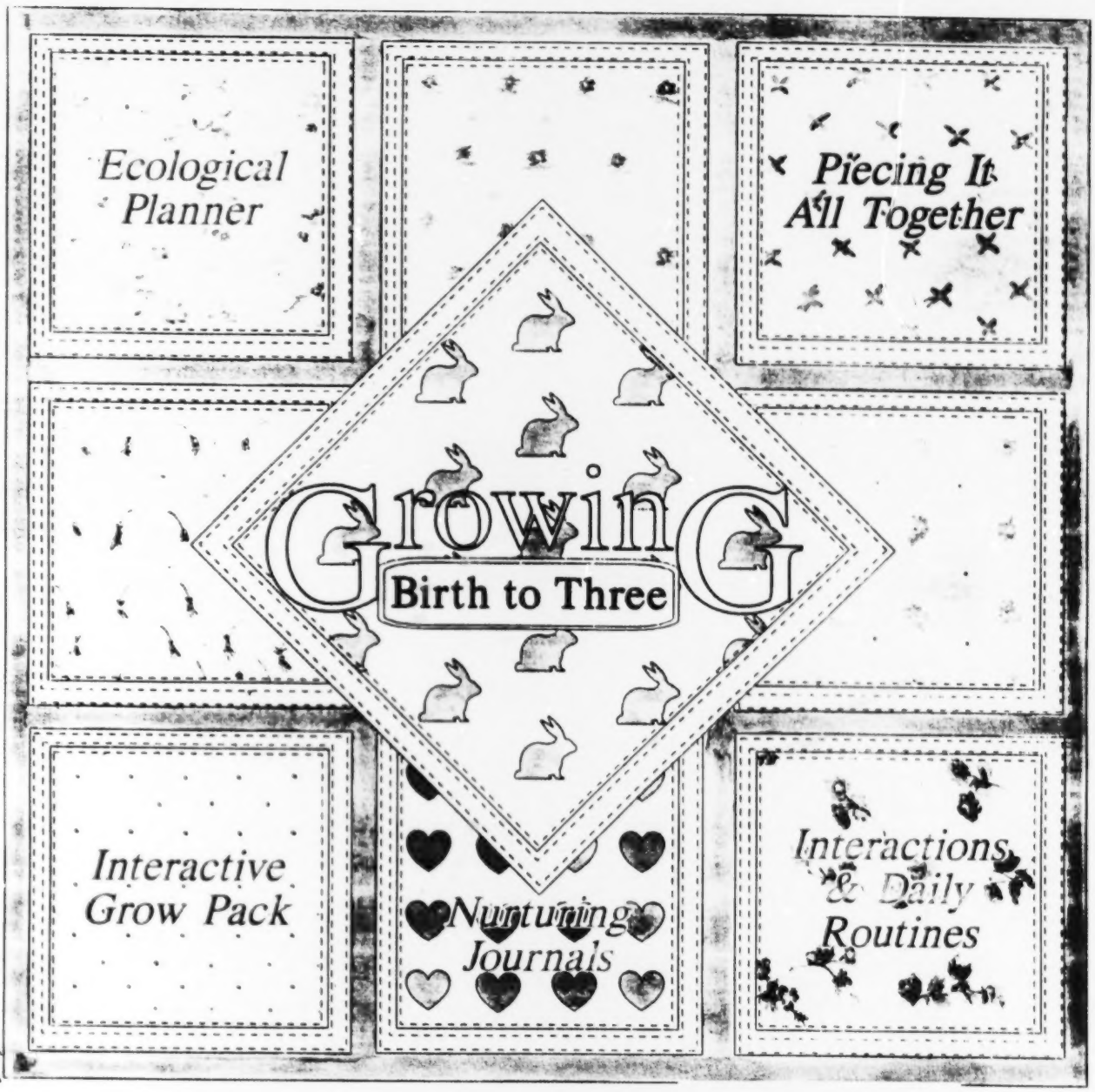

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Piecing It All Together

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Growing: Birth to Three

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Growing: Birth to Three is published as a resource to those providing services to families with young children between birth and three years of age. These materials are neither exclusive nor all inclusive and are not intended to limit providers to the suggestions, procedures, and practices contained herein.

This package of materials may be used by anyone desiring to do so, and every effort has been made to assure the accuracy and reliability of the information contained herein. However, the authors and CESA 5 make no representation, warranty, or guarantee in connection with the publication of *Growing: Birth to Three*, and hereby, expressly disclaim any liability or responsibility for injury resulting from its use.

Throughout these materials specific gender terms are used when referring to parents, children, and interventionists. This style is chosen for ease of readability only and is not intended to imply limitation or exclusion of either gender related to the specific example.

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We would like to offer our gratitude to all of the families and young children who have graciously allowed us into their homes and lives throughout the years. It is they who have taught us the meaning and purpose of our intervention relationships.

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To any that we have inadvertently omitted from this list, we extend our sincere thanks.

GROWING: BIRTH TO THREE FACT SHEET

Purpose

These materials are designed to support an ecological intervention system for families and their children between birth and three. Four premises guided the development of these materials:

1. Intervention is guided by the family
2. Parent-child interactions are the heart of early intervention
3. Family rituals, daily routines, and play reflect the patterns of family life and are the medium into which intervention is embedded
4. Recorded ongoing observations and conversations between parents and interventionists are the basis for intervention decisions

Suggested Order For Review

PIECING IT ALL TOGETHER

- describes the research and literature foundation for *Growing: Birth to Three*
- introduces the parts of *Growing: Birth to Three*

MASTER FORMS

- reproducible forms to assist in gathering important family information and documenting child/family change
- includes forms for recording information gathered during conversations and observations, developing a family generated service plan, and developing intervention suggestions responsive to each family

INTERACTIONS AND DAILY ROUTINES BOOKS

- four books correlated with the sections of the Developmental Observation Guide
- suggestions for interactive and daily routine activities to help support child/family goals
- activities are individualized for each family through use of activity planning sheets

ECOLOGICAL PLANNER

- directions for use of *Growing: Birth to Three*
- Part I Conversation, Observation, Planning Forms
- Part II Developmental Observation Guide

INTERACTIVE GROW PACK

- suggestions for facilitating mutually satisfying interactions between parents/caregivers and children
- strategies for interactive communication with cargivers
- 36 Daily Routine Situation Examples illustrate use of interactive communication strategies in intervention

NURTURING JOURNALS

- two journals for use by parents or primary caregivers
- open-ended questions and statements help parens reflect on the process of parenting
- includes information on child nutrition and immunizations

QUICK REFERENCE

If You Need This Information	See These Items
1. An understanding of the research base and rationale for these materials	*Piecing It All Together*
2. A quick overview of the intervention planning process using these materials	*Review the Flow Chart at the beginning of every book*
3. What to do when beginning intervention with a family	*Ecological Planner* *Interactive Grow Pack*
4. How to conduct and document observations and informal interviews with families	*Ecological Planner* *Interactive Grow Pack*
5. How to respond to the family's concerns about the development and maturation of their child	*Ecological Planner*
6. How to explain why certain skills and behaviors are important	*Interactions and Daily Routines Books*
7. How to observe and respond to the interactive behaviors of the child and family	*Interactive Grow Pack* *Ecological Planner*
8. How to develop the individual family service plan	*Ecological Planner* *Nurturing Journals* *Interactive Grow Pack*
9. How to develop daily routine and interactive activities with families	*Interactions and Daily Routines Books* *Ecological Planner*
10. How to help parents reflect on and record their thoughts about parenting	*Nurturing Journals*

PIECING IT ALL TOGETHER

INTRODUCTION

Growing: Birth to Three is a system of materials designed to support family guided intervention and may be best understood through comparison with a quilt. The multiple fabrics, designs, and textures of a quilt are analogous to the many pieces of information, the conversations, and the observations that occur between a family and an interventionist during the intervention process. *Growing: Birth to Three* offers formats and strategies to incorporate the multifaceted perspective of families into an intervention process which is ecological, interactive, and family guided. *Piecing It All Together* describes the research and literature foundation for *Growing: Birth to Three*. This foundation is described through a discussion of the basic premises that helped guide the development of *Growing: Birth to Three* and a description of the materials.

A number of unique features characterize *Growing: Birth to Three*. The materials provide a prototype for an intervention process which begins with the parent rather than the child, and which focuses on parent-child interactions occurring within the family as well as the larger community. The suggested process is sensitive to family uniqueness, accepting each family's individual plan for childrearing and facilitating the development of their child. The extensive use of observation and conversations with the family helps assure that the intervention is guided by the family and incorporated into their individual lifestyle. The *Growing: Birth to Three* materials can help acknowledge and respond to the importance of multiple environmental influences on child and family life, the power and influence of interactions between parent and child, and the rights of families to fully guide the course and shape the content of the intervention program (Turnbull and Turnbull, 1985, 1990).

Who Is It For?

The design of *Growing: Birth to Three* makes it appropriate for a wide variety of programs serving children from birth to three and involving families as an integral part of the intervention process. This includes, but is not limited to, early interventionists working with

children with disabilities and their families, therapists working with children and their families, Head Start Parent Child Centers and migrant programs, day care centers, family day care providers, family resource centers, social workers, and hospital personnel working with infants and premature babies. The materials are also useful as a training tool in university personnel preparation programs for early intervention, social work, nursing, and other related disciplines. As with any materials and intervention process, training and supervision are essential to insure efficacy and quality of intervention activities.

How Will It Impact the Field of Early Intervention?

Growing: Birth to Three has wide-reaching potential for interventionists, families, and children.

For interventionists, *Growing: Birth to Three*:

- provides a set of materials which supports family guided services
- helps organize the complexity of intervention
- provides a way to support positive parent-child interactions
- offers a structure and framework for ecological intervention
- suggests strategies to enhance parent-interventionist interactions and communication
- encourages a cultural match between each family and the intervention approaches

For families, *Growing: Birth to Three*:

- insures that what is important to the family becomes the intervention plan
- gives credit to the family and their environment as the optimal setting for infant growth and development
- builds on each family's routines and rituals as defined by their familial cultural code (Sameroff and Fiese, 1990)
- helps the family better understand how to observe their child so they can better anticipate and support the next steps in development
- makes life easier for caregivers as they address their child's developmental needs within their daily routines and rituals
- assists caregivers in supporting the child's development within everyday activities
- respects and builds on existing parent-child interactions
- provides a journal for the family to use to reflect upon their relationship with their child

For children, *Growing: Birth to Three*:

- recognizes children as active participants in their own development
- recognizes the influence of the family, other caregivers, maturational factors, environments, and the interventionist on the development of children
- offers opportunities for development within the context of play, daily routines, and family rituals
- keeps children within the family system, rather than isolating them for developmental activities

- **recognizes that development is unique to each child, and developmental competence is defined by each child's familial and cultural experience (Sameroff and Fiese, 1990)**

The development of *Growing: Birth to Three* can be compared to the process of creating a handcrafted quilt. Typically, quilters refer to patterns and designs which have been developed by other experts and use their own creativity and experience in selecting specific fabrics and color combinations to create a unique piece of work that represents the style and skills of the quilt maker. Likewise, the developers of *Growing: Birth to Three* referred to current research and literature on child development and intervention to create the foundation for these materials. In addition, more than thirty years of combined experience in providing family centered intervention guided the development of this product, resulting in a unique system of materials sensitive to the complexity of both families and the intervention process. This research and experiential foundation has resulted in four basic premises upon which *Growing: Birth to Three* is based.

1. Intervention is guided by the family.
2. Parent-child interactions are the heart of early intervention.
3. Family rituals, daily routines, and play reflect the patterns of family life and are the medium into which intervention is embedded.
4. Recorded ongoing observations and conversations between parents and interventionists are the basis for intervention decisions.

Each of these premises is discussed here.

BASIC PREMISE NUMBER ONE: Intervention is guided by the family

Families today differ widely in composition, values, resources, and needs. Each family is unique in their culture, their concerns and needs relative to intervention, and how they wish intervention to be carried out within their family. The recognition of the influence of ethnic and cultural diversity on our understanding of development has led to the effort to avoid imposing one cultural developmental agenda on all families in favor of accepting the family's own plan for childrearing and facilitating development (Turnbull and Turnbull, 1986). Family guided intervention follows the family's lead in order to respect not only the child's development and maturation, but also the family's definition of what developmental issues are important for them.

Research on intervention effects in programs for infants reveals more positive results, as measured by child developmental change, in those programs which focused on child and family. The level of active engagement of families in the intervention process is linked to the impact of intervention (Meisels, 1992). Intrafamilial and informal support accounted for a significant number of outcome variables related to child,

parent, and family functioning, whereas traditional early intervention which focused only on the child accounted for only one of ten outcome variables. Dunst suggests that these research results, as well as other studies, "provide support for the broad-based social system definition of intervention" (Dunst, Trivette, and Deal, 1988).

Growing: Birth to Three is not designed to give simple intervention solutions to complex situations. The materials are designed to encourage the interventionist to join with the family, to listen and observe, to ask the right questions, and to learn from the family's history, perceptions, dreams, fears, and expectations. The intervention process suggested by these materials fosters a three-pronged approach that recognizes and builds on existing strengths in the family, assists the family in identifying and meeting their goals, and supports the child's development and parent-child interactions. Through this process, the parents and interventionist together determine how the program can best provide what the family wants (Dunst, Trivette,and Deal, 1988; Bailey, 1987; Salisbury, Vincent, Gorrafa, 1987; Strain, 1987). As Sameroff and Fiese (1990) state:

> *It is beyond the scope of even the most ambitious intervention program to manipulate all the parameters that influence child development. The alternative is to understand determinants of development in sufficient degree to choose a level of complexity appropriate to the problem to be solved, the developmental stages of the child and family, and available supports.*

Research into developmental outcomes for young children with neurological damage (Parmelee and Sigman, 1984), mental health disorders (Rutter, 1979), and a combination of biological and family risk factors (Sameroff, Seifer, Barocas, Zax, and Greenspan, 1987) has demonstrated conclusively that it is the effect of multiple risk factors, rather than the existence of a single biological, psychological, or environmental factor, which results in adverse developmental outcome (Sameroff and Chandler, 1975; Sameroff, Seifer, Barocas, Zax, and Greenspan, 1987; Siders, Riall, Campbell, and Crow, 1987; Vincent, Salisbury, Strain, McCormick, and Tessier, 1990). The elimination of accumulating risks to optimal developmental outcome therefore becomes the goal of intervention, rather than the teaching of developmental skills and milestones (Parmelee and Haber, 1973; Rutter, 1979; Greenspan, 1981). Recognizing the complexity of intervention, *Growing: Birth to Three* takes a transactional and ecological approach to family guided intervention.

The transactional model (Sameroff and Fiese, 1990) supports a comprehensive and ecological approach to early intervention. The focus of early intervention has shifted from a child-oriented perspective to one which reflects an emphasis on the ecology of the family and community, as described by Broffenbrenner (Broffenbrenner, 1979;

Sameroff and Fiese, 1990). This approach, supported both in human ecology theory and family systems theory (Carter and McGoldrick, 1980), examines multiple systems, including the family, its culture, and roles of members; the neighborhood and community; and the larger society in which we all live. These systems all interact and influence each other and cannot be treated in isolation. The ecological approach is reflected in recent legislation, Public Law 99-457 and subsequent reauthorizations. Sections of this law specifically relating to programs for children with disabilities between the ages of birth and three mandate that services be family centered and that intervention address the broader context of family and community. An Individual Family Service Plan (IFSP) identifying family resources, priorities, and concerns guides the intervention process described through this legislation.

Growing: Birth to Three offers a practical application of the transactional model of intervention (Sameroff and Chandler, 1975) as applied to the interactive patterns of family life with infants by Sameroff and Fiese (1990). The transactional model proposes that parents and infants influence each other reciprocally and continuously over time. This process of influence is carried out within an environmental context which is also reciprocally influencing and influenced.

The transactional model describes significant, ongoing exchanges between parents and their children, lasting from moment to moment and extending to a lifetime. As Sameroff and Fiese define it, "Whenever parents change their way of thinking about or behaving toward the child as a result of something the child does, a transaction has occurred" (Sameroff and Fiese, 1990). A transaction also occurs when a child changes as a result of interacting with the parents and others in the environment. The two important characteristics of transactions are that they are changes in behavior or attitude contingent on the actions of the others in the environment, and that transactions occur across time, from one event or mutual experience to the next, so that the influence is continuing. This process of influence occurs within an environment which is influenced by the child and family and which influences the parents' attitudes toward the child's development and the child's opportunities to experience the world. Not only is the child's developmental status continually changing, but the cultural and environmental influences are determining and changing the experiences of the family in a dynamic interplay of environment and culture, parent-child interaction, and individual parent and child learning and development.

Growing: Birth to Three supports sensitivity to each family's uniqueness by providing a format that insures that the family guides the intervention. Emphasis is placed on conversing with families through open-ended formats to gather information which directs the intervention process. The materials also offer means for parents to reflect on

family and child issues which they may wish to discuss with the interventionist. The process recognizes the importance of the many environments which influence the family and supports intervention across these environments.

BASIC PREMISE NUMBER TWO: Parent-child interactions are the heart of early intervention

Growing: Birth to Three places the family and the nurturing of parent-child interactions at the heart of the intervention process. It considers how the parents understand and empathize with their child's capacity to develop, and what personal strengths, knowledge, and resources the parents have available to help them facilitate the child's developmental agenda (Greenspan, 1990; Norris, 1991; Dunst, 1988). The *Growing: Birth to Three* materials support taking an in-depth view of parent-child interactions, recognizing that the daily interactions that occur between a caregiver and child are a primary influence on the developmental outcomes of that child (Beckwith, 1976; Barnard, Booth, Mitchell, Telzrow, 1988). This emphasis is consistent with research in the field of early intervention. Interpreting Vygotsky, Kaye suggests that parents create persons by responding as if the infant's expressions are more meaningful than they are (Kaye, 1982). Trevarthen (1988) asserts that even newborns are "primed" for "good mothering", as evidenced by "excessive sleep, inertia, and silence when affectionate human care is withheld." Early attachment relationships critically influence personality development (Bowlby, 1969) and interactions with sensitive, predictable, and responsive adults allows infants to develop an idea of their own competence (Watson, 1972; Watson and Ramey, 1972). The parents' environmental accommodations in response to the infant's communications promote the understanding of social contingencies and effect behaviors such as smiling, holding, talking, and looking (Emde, 1980). Mothers who respond promptly to their infant's cries have children who cry less and communicate more (Bell, Ainsworth, 1972; Crockenberg and McCluskey, 1986). Children who form strong attachments to primary caregivers show less distress and positive differences in task persistence, quality of play, and problem solving (Sroufe and Fleeson, 1986).

Parents and children may experience difficulty relating due to a variety of possible risk factors, biological or emotional vulnerability, or the mismatch of temperament and style. The challenge in such a circumstance is to find and nurture the interactive patterns that are adequate and satisfying and then attempt to facilitate an increase in their occurrence so that they compete with and replace less satisfying transactions.

The techniques put forth in *Growing: Birth to Three* are designed to assist interventionists in meeting this challenge. The intervention process is not intended to intrude upon or judge the family's patterns of interaction. The

role of the interventionist is to join with the family in finding interactive strengths, provide requested or functional information, and support the family's efforts to optimize their child's developmental outcomes and their individual competence in their parenting role. The interventionist works in partnership with parents to provide a bridge or scaffold (Kaye, 1982; Vygotsky, 1967, 1978) when needed to assist them as they support the next steps in their child's development or strive to attain other family goals.

Growing: Birth to Three supports and encourages naturalistic parent-child interactions by embedding activities into the family's natural environment and interaction style. The work of Mahoney supports the importance of parents as interactive partners. A series of research studies used a measure of parent directiveness developed by Kaye and Charney (1980, 1981) to identify aspects of parent-child interactions which are most predictive of competence in early childhood (Mahoney, Robinson, and Powell, 1992). The studies were based on the observation that parents of young children with developmental delays and disabilities often adopt a highly directive and performance-focused style of interaction, which has been shown to produce less optimal developmental outcomes in normally developing young children. Results indicate that children with disabilities achieve optimal rates of development when adults are responsive, child-oriented, non-directive, and not instructionally oriented, perhaps because the parents' style of interaction influences children's intrinsic or developmental motivation. These findings replicate reports from investigations of parents' interactions with normally developing children (Bell and Ainsworth, 1972; Yarrow, Rubenstein, and Pederson, 1975).

BASIC PREMISE NUMBER THREE: Family rituals, daily routines, and play reflect the patterns of family life and are the medium into which intervention is embedded

One of the ideas which guided development of *Growing: Birth to Three* was that family culture and environment influence the selection of intervention goals and the means for reaching the goals (Hanson and Lynch, 1992). Cultural codes organize and regulate a society's childrearing system. These cultural codes operate within each family to help the family organize and relate to the society as a whole. The family codes are demonstrated through family rituals, stories, beliefs, and myths about the family (Sameroff and Fiese, 1990). The family guided intervention process blends into these existing cultural and family codes, rather than creating disruptions and intrusion within the family.

Growing: Birth to Three suggests that the interventionist listen, watch, and then respond with intervention ideas which are organized around typical daily routines. These activities can be adapted to fit each individual family's specific routines so that they aren't a burden on the family. Daily

routines and rituals provide opportunities to explore and practice new behaviors in a wide variety of situations, giving the child a chance to generalize and maintain behaviors that will support functional competence throughout life.

Play activities within the family offer additional opportunities for supporting intervention goals. *Growing: Birth to Three* emphasizes the importance of play in the family, encouraging parents and family members to observe and join the child's play in ways that are interactive and reflective of the child's motivation and interests, as well as the child's developmental capabilities (Norris, 1991). Through play, the child develops cognitive, social, emotional, motor, and language competence (Westby, 1991; Fenson, 1986; Slade, 1987; Vygotsky, 1978). It offers the young child important opportunities to develop a sense of personal control; to practice and integrate behaviors, skills, and goal-directed activities; and to assimilate and experiment with rules, constraints, and strategies (Bruner, 1973; Vygotsky, 1967). Play is motivating and can be used as a means of encouraging cooperation, has potential for carryover with readily available toys and/or interactions with family members, and facilitates integration of sensory information (Rast, 1984; Manolson, 1984; Musselwhite, 1986).

Growing: Birth to Three takes an ecological approach through intervention activity suggestions that are embedded within daily routines and rituals of family life. Interactive strategies are provided that can help the family support the child's engagement with objects and people in the environment. The interactive communication strategies in the *Interactive Grow Pack* assist the interventionist to support and influence mutually positive play and interactive experiences between caregivers and children.

BASIC PREMISE NUMBER FOUR: Recorded ongoing observations and conversations between parents and interventionist are the basis for intervention decisions

Record keeping is a necessary part of planning and service provision. However, the interactions between families and professionals prior to, and during, goal planning and program implementation are of critical importance. Establishing a positive, trusting, and collaborative relationship with families is necessary to assure beneficial outcomes for the family (Bailey, Winton, Rouse, Turnbull, 1990). If this mutual trust and interaction does not occur, information gathering and intervention in general are likely to have little meaning and less than optimal success.

Recognition of the complex system of variables that are influenced by intervention challenges the field of early intervention to devise appropriate systems to document change (Baird, Hass, McCormick, Corrith, and Turner, 1992). Variables present in the family system are not easy to control and methods for their measurement are not widely available.

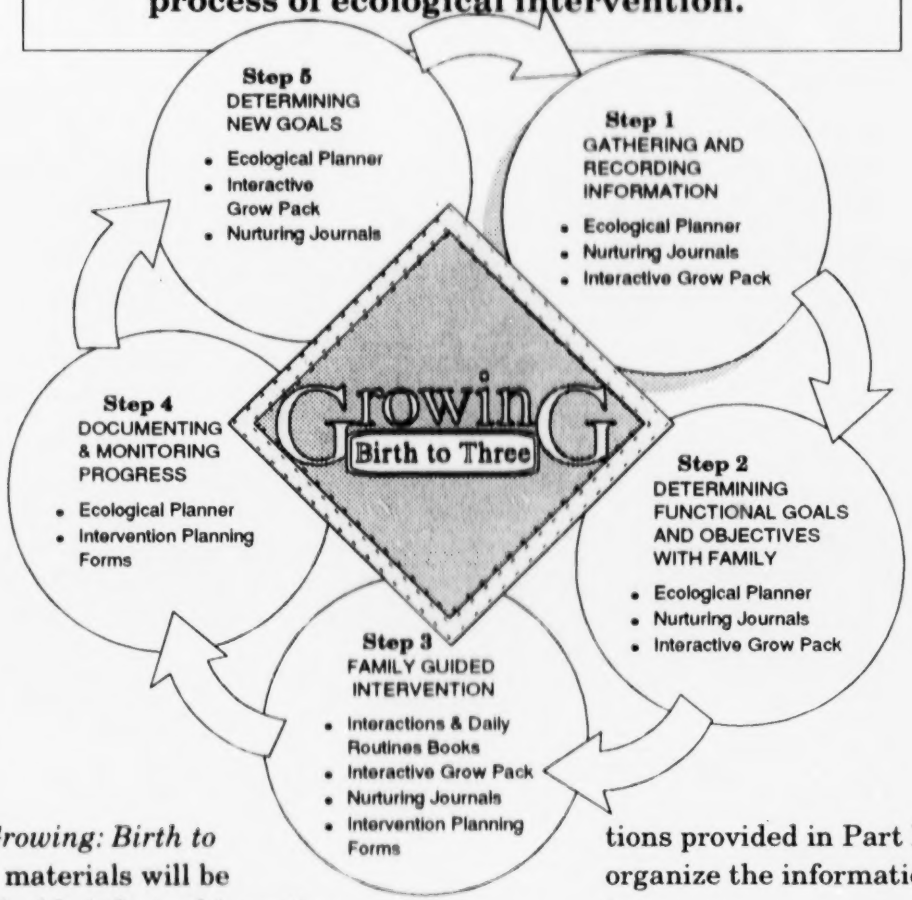
Traditional clinical treatment programs can be readily measured; when the child makes measurable developmental progress the professional feels rewarded. Conventional tools used in early intervention are based on professional definitions of appropriate childrearing environments and child development skills. Parents often have little opportunity to state their own opinion of appropriate environments, routines, and rituals that may foster optimal development within their family. In addition, interventionists must realize that their own personal experience base and value system will impact the accuracy of the data collected. The observations made and data collected may be influenced by interpretive and cultural bias (Baird, Hass, McCormick, Corrith, and Turner, 1992).

Growing: Birth to Three attempts to address the challenge of appropriate data collection in a number of ways. Rather than look only at developmental milestones for the child, *Growing: Birth to Three* provides a format for information collection relative to environments, including formal and informal family support systems; interactions; development of the child; and parent satisfaction. Forms are provided to help the interventionist work with the family to gather information over time about the child, the interactions within the family, and the environment. This information guides the interventionist to ask the appropriate questions and to gain a deeper understanding of the family. Ongoing communication with the family insures the flexibility and fluidity of intervention as new information is incorporated into the family service plan according to the changing priorities and perceptions of the family members. Progress toward the achievement of family generated goals is documented and monitored through this family service plan.

DESCRIPTION OF *GROWING: BIRTH TO THREE*

Growing: Birth to Three consists of a number of distinct pieces which support a continuous, individualized curriculum planning and intervention process. This five-step process will focus on family-generated goals and the selection of interventions which reflect the family's perspective, history, wishes, and resources. The following flow chart identifies the specific *Growing: Birth to Three* materials to be used in each step of the process.

A system of materials developed to support the process of ecological intervention.



The *Growing: Birth to Three* materials will be described briefly in this section. A more detailed description of their use can be found in the *Ecological Planner*.

Ecological Planner

Part I of the *Ecological Planner* suggests guidelines for observation and communication, provides a way to document transactions across time, and offers a selection of formats for individualized intervention planning. This collection of materials is designed to help gather and acknowledge the important information shared by the family, and to reflect the goals and activities the family wants to address through intervention. The forms and suggestions provided in Part I can help organize the information relative to:

- environmental supports and resources available to the family;
- caregiver-child interaction patterns;
- the child's current developmental profile;
- caregiver perceptions of strengths and needs of the family;
- caregiver goals, expectations, and wishes.

Part II of the *Ecological Planner* is called the *Developmental Observation Guide*. This *Guide* provides an in-depth, developmentally sequenced series of behaviors that children fre-

quently display from birth through thirty-six months. It is designed to assist caregivers to predict and anticipate the next steps in development so they can prepare to best support their child's progress through daily routines, rituals, and play interactions. The *Guide* is not intended to be used as a checklist, nor is it to be completed in its entirety for each child. Parental priorities and previous medical/educational recommendations, along with interventionist observations and the information gathered during visits with the family, help to identify the sections of the *Guide* to be completed at a given time. These sections contain the developmental information related to the expressed concerns and interests of the family. The developmental information identified in a selected section will contribute to that part of the individualized curriculum plan designed to facilitate the child's success in daily family and community activities. It should be noted that the developmental information is only a small part of what the family may determine as important goals for their intervention plan. This family guided process helps insure that the services provided match what the family has said they want from intervention.

The *Developmental Observation Guide* is organized into eleven sections, each of which is briefly described here.

A. ***I've Arrived! Are You Ready? (Premature Infants and Newborns)*** This section provides support for parent observations and information to help parents recognize the sometimes subtle and ambiguous cues that premature infants and newborns offer (Bromwich, 1981). It is designed to help parents respond to all the things the baby is beginning to do, and draws parents' attention to the infant's capacity for sensory and motor communication.

B. ***I'm Hungry (Oral Motor Development)*** This section addresses the development of feeding patterns, which can influence mutually satisfying parent-child interactions and future language skills. As Barnard, Hammond, Booth, and colleagues (1989) state: *"Interactions involved in normal feeding propel an infant from a state of isolation and self-absorption to an active engagement with other people and the world. High quality feeding interactions during the first years of life tend to be positively linked to the child's subsequent cognitive and linguistic competence and to more secure attachments to major caregivers."*

C. ***Using My Senses (Organization of Sensory Information)*** The sensory system's crucial contribution to later development is highlighted in this section. The behaviors included here point out the amazing variety of organized responses an infant possesses or learns in order to control both self and the outside world (Greenspan, 1990).

D. ***I'm Catching On (Object Permanence/Individuation/Self-Esteem)*** This section focuses on the child learning to form expectations about

the continuing existence of people and objects and to distinguish between self and others (Piaget, 1952). These awarenesses build the child's confidence and self-esteem.

E. ***Understanding My World (Receptive Language/Attention/Cognition)*** This section highlights the importance of developing shared meaning between child and family. As the caregiver attributes meaning to the child's actions and vocalizations and responds contingently, the child learns ways to think about, explore, and communicate about the world.

F. ***Finding My Voice (Communication [gesture, vocal]/Cognition)*** Realizing that it is impossible to separate social, cognitive, and communicative development, the importance of interactive fit between the child and the caregiving environment is considered in this section. Developing relatedness, contingent responsiveness, turntaking, two-way communication, establishing shared meaning, and communicative intent and motivation are the focus of observations relative to this section (Norris, 1991; Mahoney and Powell, 1986).

G. ***Who's In Charge? (Cause and Effect/Gaining Control)*** This section begins with self-protective acts like turning away and crying, and then moves to the essential non-verbal signals which establish the ground rules between infants and parents. Greenspan (1990) has demonstrated that young children learn to adjust their behavior to the parents' non-verbal gestures and facial expressions before their first birthday. This self-awareness is rapidly transformed into the delightful understanding that the child can make things happen, as the infant begins to understand how actions on objects or people can produce interesting and complex results (Piaget, 1952).

H. ***I'm Getting Organized (Function/Time/Classification)*** Babies use their developing skills in perception, discrimination, and exploration to organize what they know about their world. Even newborns have some ability to recognize that objects belong to different categories, at least that some are similar and some dissimilar (Mandler, 1983). This gives babies a "road map" or foundation for understanding and categorizing objects and people in the environment, anticipating changes in schedule or daily routines and, later, pairing language symbols with the classifications made regarding objects, their function, unique properties,and similarities.

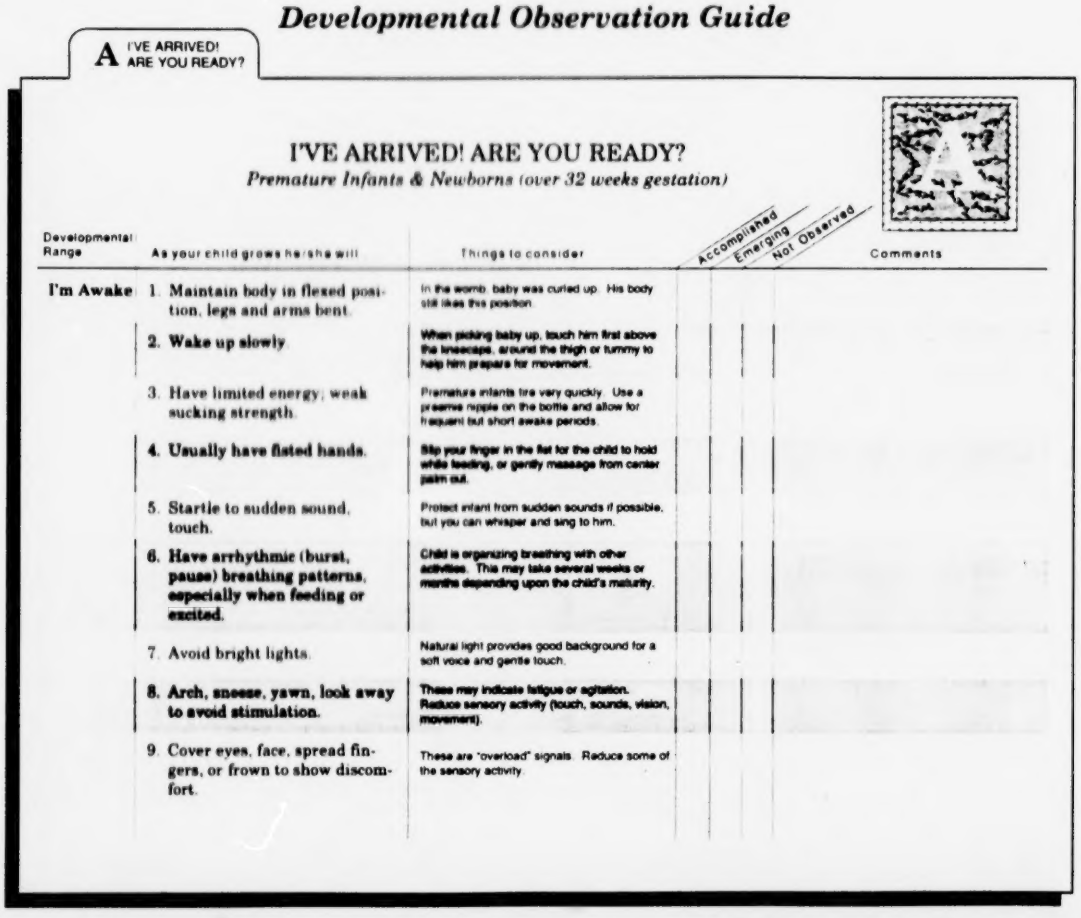
I. ***I'd Rather Do It Myself (Feeding/Dressing/Developing Independence)*** This section includes the actions and activities usually found under the heading of "Self-help" and includes the child's motivation for independence and mastery (Yarrow, 1981).

J. On The Move (Large Muscle Development) Behaviors in this section focus on early motor progressions as prerequisites for more complex motor skills. Weight shifting, balance, coordination, and body positioning are emphasized, as well as the sequencing of movements to accomplish a goal, such as ball play or jumping.

K. Using My Hands (Small Muscle Development) The child's ability to coordinate small muscle movements for critical exploration and mastery of the environment is addressed here.

The two-part *Ecological Planner* supports the family guided process. The *Developmental Observation Guide* is to be used over time to help parents better understand and predict their child's next steps in development and respond in ways that facilitate growth. These goals, along with other family-identified goals, may gain or lose a priority position due to continuously changing circumstance in the family's life. In this process the family, in collaboration with the interventionist, determines when a goal is accomplished and when new things need to happen. The forms and suggestions included in Part I of the *Ecological Planner* can be used to facilitate this process.

Developmental Observation Guide



A I'VE ARRIVED! ARE YOU READY?

I'VE ARRIVED! ARE YOU READY?

Premature Infants & Newborns (over 32 weeks gestation)

Developmental Range	As your child grows he/she will	Things to consider	Accomplished	Emerging	Not Observed	Comments
I'm Awake	1. Maintain body in flexed position, legs and arms bent.	In the womb, baby was curled up. His body still likes this position.				
	2. Wake up slowly.	When picking baby up, touch him first above the kneecaps, around the thigh or tummy to help him prepare for movement.				
	3. Have limited energy, weak sucking strength.	Premature infants tire very quickly. Use a preemie nipple on the bottle and allow for frequent but short awake periods.				
	4. Usually have fisted hands.	Slip your finger in the fist for the child to hold while feeding, or gently massage from center palm out.				
	5. Startle to sudden sound, touch.	Protect infant from sudden sounds if possible, but you can whisper and sing to him.				
	6. Have arrhythmic (burst, pause) breathing patterns, especially when feeding or excited.	Child is organizing breathing with other activities. This may take several weeks or months depending upon the child's maturity.				
	7. Avoid bright lights.	Natural light provides good background for a soft voice and gentle touch.				
	8. Arch, sneeze, yawn, look away to avoid stimulation.	These may indicate fatigue or agitation. Reduce sensory activity (touch, sounds, vision, movement).				
	9. Cover eyes, face, spread fingers, or frown to show discomfort.	These are "overload" signals. Reduce some of the sensory activity.				

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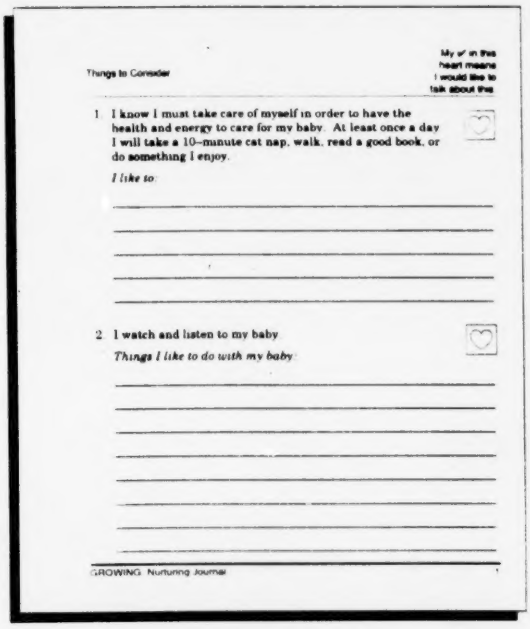
Nurturing Journals

The *Nurturing Journals* are designed for use by parents or primary caregivers. Each book contains open-ended questions or statements to help parents reflect on the process of parenting. The parents choose whether to use the *Journals* and whether to share this information with the interventionist. If the parents choose to discuss the items in the *Journals*, the interventionist may gain insight and increased understanding of the more complex issues important to the family.

Interactive Grow Pack

The *Interactive Grow Pack* represents the heart of interactive intervention. It offers strategies for interactive communication with parents, as well as ways to enhance and encourage mutually satisfying interactions between caregiver and child. These materials help the interventionist: attend to and nurture the emerging capabilities of child and parents; announce and applaud successes; assist in problem solving relative to interactions; encourage family independence and autonomy; and recognize the unique agenda of each child and family.

Nurturing Journal



Things to Consider

My ♡ in this heart means I would like to talk about this

1. I know I must take care of myself in order to have the health and energy to care for my baby. At least once a day I will take a 10–minute cat nap, walk, read a good book, or do something I enjoy.

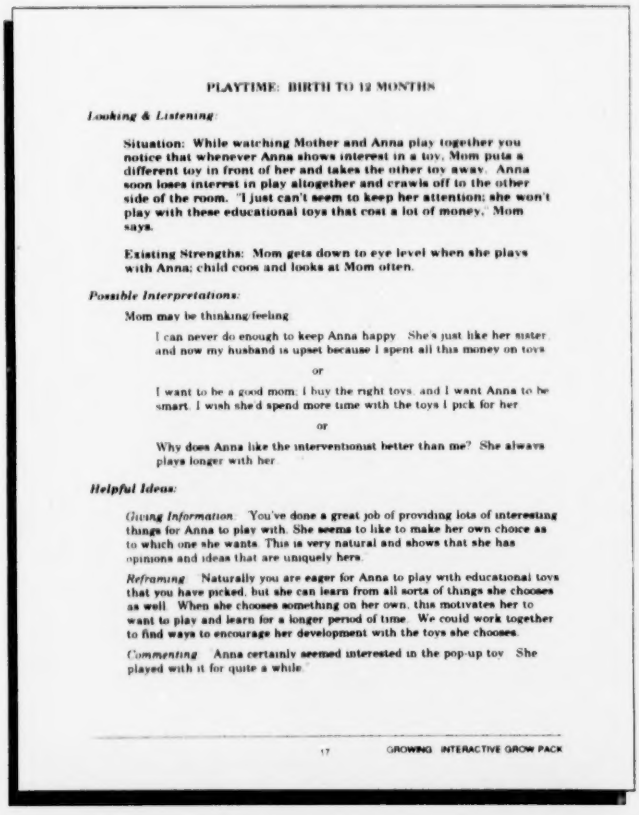
I like to:

2. I watch and listen to my baby.

Things I like to do with my baby:

GROWING: Nurturing Journal

Interactive Grow Pack



PLAYTIME: BIRTH TO 12 MONTHS

Looking & Listening:

Situation: While watching Mother and Anna play together you notice that whenever Anna shows interest in a toy, Mom puts a different toy in front of her and takes the other toy away. Anna soon loses interest in play altogether and crawls off to the other side of the room. "I just can't seem to keep her attention; she won't play with these educational toys that cost a lot of money," Mom says.

Existing Strengths: Mom gets down to eye level when she plays with Anna; child coos and looks at Mom often.

Possible Interpretations:

Mom may be thinking/feeling:

I can never do enough to keep Anna happy. She's just like her sister and now my husband is upset because I spent all this money on toys.

or

I want to be a good mom. I buy the right toys, and I want Anna to be smart. I wish she'd spend more time with the toys I pick for her.

or

Why does Anna like the interventionist better than me? She always plays longer with her.

Helpful Ideas:

Giving Information: "You've done a great job of providing lots of interesting things for Anna to play with. She seems to like to make her own choice as to which one she wants. This is very natural and shows that she has opinions and ideas that are uniquely hers."

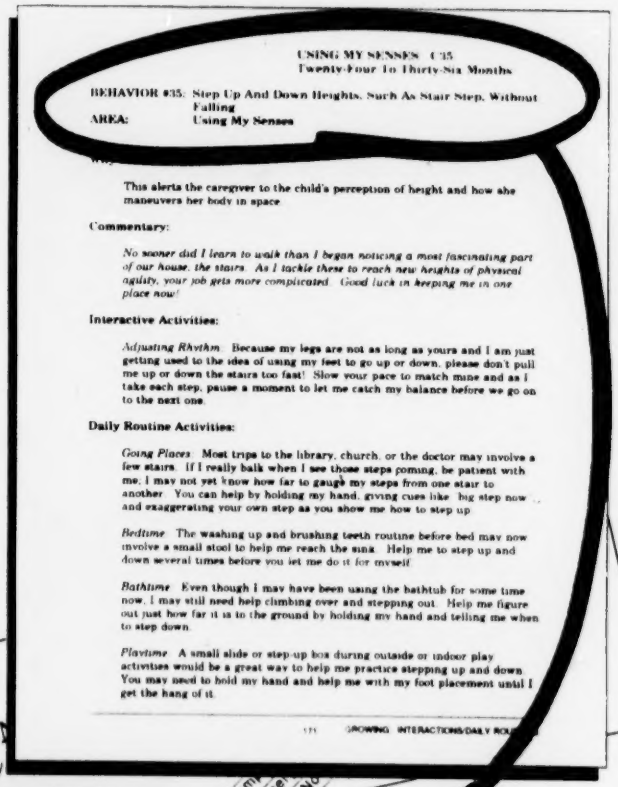
Reframing: "Naturally you are eager for Anna to play with educational toys that you have picked, but she can learn from all sorts of things she chooses as well. When she chooses something on her own, this motivates her to want to play and learn for a longer period of time. We could work together to find ways to encourage her development with the toys she chooses."

Commenting: "Anna certainly seemed interested in the pop-up toy. She played with it for quite a while."

17 GROWING: INTERACTIVE GROW PACK

Interactions and Daily Routines Books

The *Interactions and Daily Routines Books* offer activity suggestions for each skill or behavior listed in the *Developmental Observation Guide*. Activity suggestions are embedded into daily routines, rituals, play, and interactions. Information is provided to explain why the behavior is important, and a child's perspective is given as to how to best support the development of the behavior. Individual activities can be developed for use with individual families using the activity planning sheets found in the *Master Forms Packet*.



USING MY SENSES C35
Twenty-Four To Thirty-Six Months

BEHAVIOR #35: Step Up And Down Heights, Such As Stair Step, Without Falling
AREA: Using My Senses

This alerts the caregiver to the child's perception of height and how she maneuvers her body in space.

Commentary:

No sooner did I learn to walk than I began noticing a most fascinating part of our house, the stairs. As I tackle these to reach new heights of physical agility, your job gets more complicated. Good luck in keeping me in one place now!

Interactive Activities:

Adjusting Rhythm: Because my legs are not as long as yours and I am just getting used to the idea of using my feet to go up or down, please don't pull me up or down the stairs too fast! Slow your pace to match mine and as I take each step, pause a moment to let me catch my balance before we go on to the next one.

Daily Routine Activities:

Going Places: Most trips to the library, church, or the doctor may involve a few stairs. If I really balk when I see those steps coming, be patient with me. I may not yet know how far to gauge my steps from one stair to another. You can help by holding my hand, giving cues like "big step now..." and exaggerating your own step as you show me how to step up.

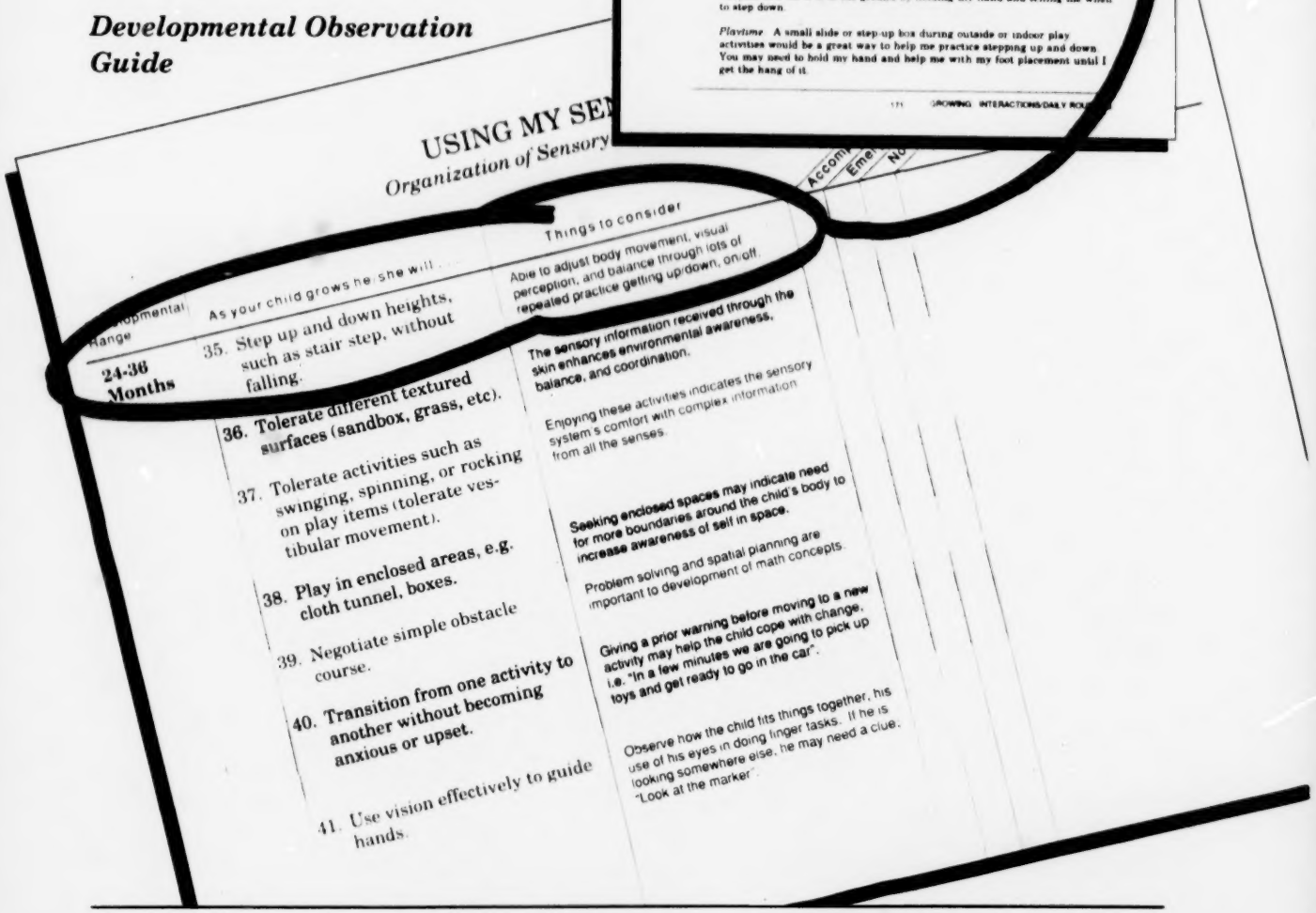
Bedtime: The washing up and brushing teeth routine before bed may now involve a small stool to help me reach the sink. Help me to step up and down several times before you let me do it for myself.

Bathtime: Even though I may have been using the bathtub for some time now, I may still need help climbing over and stepping out. Help me figure out just how far it is to the ground by holding my hand and telling me when to step down.

Playtime: A small slide or step-up box during outside or indoor play activities would be a great way to help me practice stepping up and down. You may need to hold my hand and help me with my foot placement until I get the hang of it.

171 GROWING: INTERACTIONS/DAILY ROU

Developmental Observation Guide



USING MY SE
Organization of Sensory

Developmental Range	As your child grows he/she will...	Things to consider
24-36 Months	35. Step up and down heights, such as stair step, without falling.	Able to adjust body movement, visual perception, and balance through lots of repeated practice getting up/down, on/off.
	36. Tolerate different textured surfaces (sandbox, grass, etc).	**The sensory information received through the skin enhances environmental awareness, balance, and coordination.**
	37. Tolerate activities such as swinging, spinning, or rocking on play items (tolerate vestibular movement).	Enjoying these activities indicates the sensory system's comfort with complex information from all the senses.
	38. Play in enclosed areas, e.g. cloth tunnel, boxes.	**Seeking enclosed spaces may indicate need for more boundaries around the child's body to increase awareness of self in space.**
	39. Negotiate simple obstacle course.	Problem solving and spatial planning are important to development of math concepts.
	40. Transition from one activity to another without becoming anxious or upset.	**Giving a prior warning before moving to a new activity may help the child cope with change, i.e. "in a few minutes we are going to pick up toys and get ready to go in the car".**
	41. Use vision effectively to guide hands.	Observe how the child fits things together, his use of his eyes in doing finger tasks. If he is looking somewhere else, he may need a clue. "Look at the marker."

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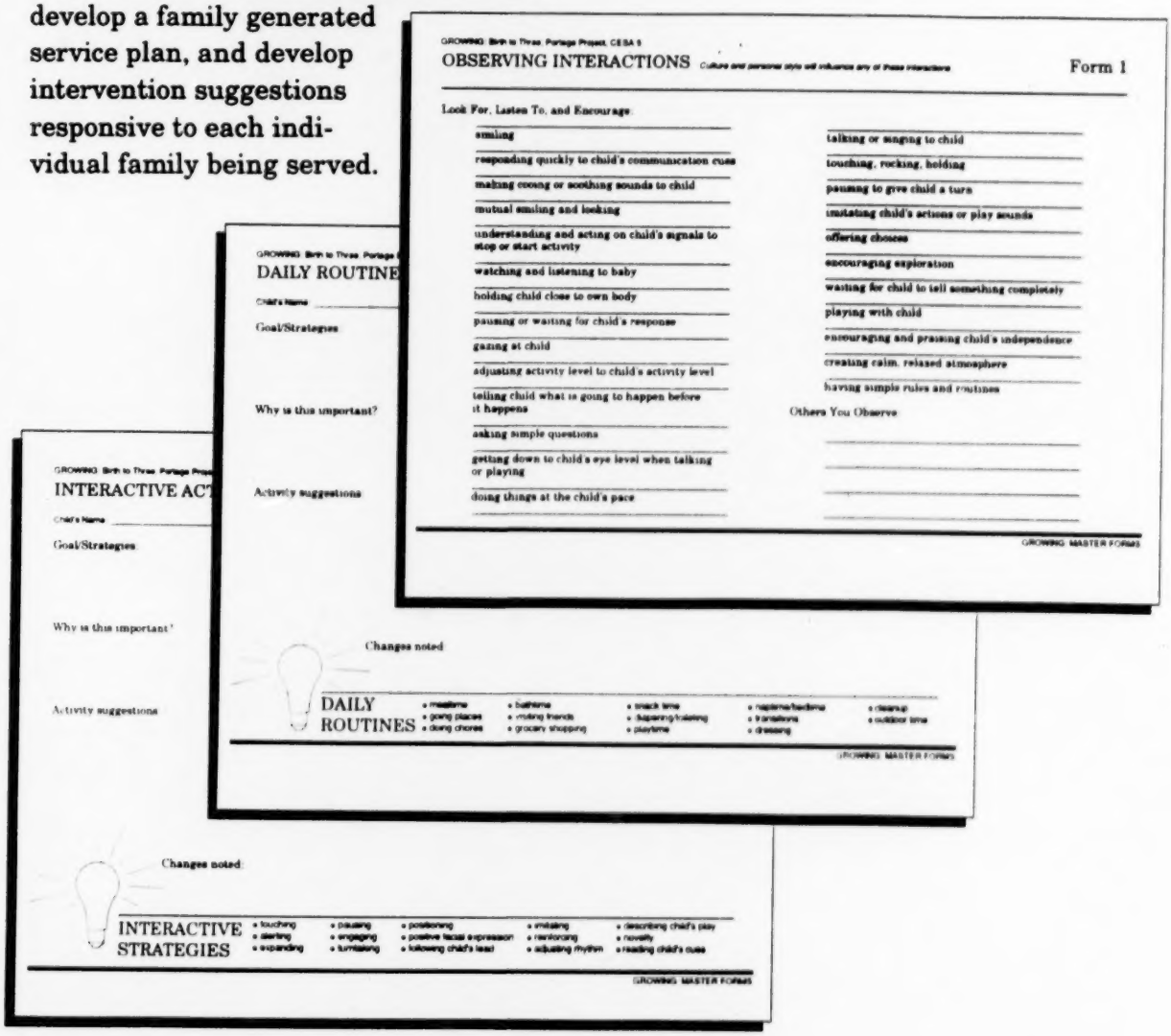
Master Forms Packet

This packet of reproducible forms assists the interventionist in carrying out intervention which is family guided. Forms included are designed to document communications and observations, develop a family generated service plan, and develop intervention suggestions responsive to each individual family being served.

Master Forms


OBSERVING INTERACTIONS
Form 1
Look For, Listen To, and Encourage
smiling
responding quickly to child's communication cues
making cooing or soothing sounds to child
mutual smiling and looking
understanding and acting on child's signals to stop or start activity
watching and listening to baby
holding child close to own body
pausing or waiting for child's response
gazing at child
adjusting activity level to child's activity level
telling child what is going to happen before it happens
asking simple questions
getting down to child's eye level when talking or playing
doing things at the child's pace
talking or singing to child
touching, rocking, holding
pausing to give child a turn
imitating child's actions or play sounds
offering choices
encouraging exploration
waiting for child to tell something completely
playing with child
encouraging and praising child's independence
creating calm, relaxed atmosphere
having simple rules and routines
Others You Observe
DAILY ROUTINE
Goal/Strategies
Why is this important?
Activity suggestions
Changes noted
DAILY ROUTINES
INTERACTIVE AC
Goal/Strategies
Why is this important?
Activity suggestions
Changes noted
INTERACTIVE STRATEGIES

Intervention is a complex process and no set of materials can be expected to stand alone in meeting the diverse needs of families. Therefore, it is recommended that the ideas in *Growing: Birth to Three* be implemented in collaboration with community referral resources and intervention service systems, and that these materials be supplemented with the rich resources outlined in the bibliography included with *Growing: Birth to Three*.

BIBLIOGRAPHY

Ainsworth, M.D.S. (1979). Attachment as related to mother-infant interaction. In J.S. Rosenblatt, R.A. Hinde, C. Beer, and M.C. Busnel (Eds.), *Advances in the Study of Behavior*, Vol. 9. NY: Academic Press.

Bailey, D.B. (1987). Differences in values and priorities for services. *Topics in Early Childhood Special Education*, 7, pp 59-71.

Bailey, D., Winton, P., Rouse, L., Turnbull, A. (1990). Family goals in infant intervention: analysis and issues. *Journal of Early Intervention*, Vol. 14, No. 1, pp 15-26.

Baird, S., Haas, L., McCormick, K., Corrith, C., Turner, K. (1992). Approaching an objective system for observation and measurement: Infant -parent social interaction code. *Topics In Early Childhood Special Education*. 12(4), pp 544-571.

Barnard, K.E., Booth, C.L., Mitchell, S.K., & Telzrow, R. (1988). Newborn nursing models: A test of early intervention to high risk infants and families. In E. Hibbs (Ed.), *Children and Families: Studies In Prevention and Intervention*, pp 63-81. Madison, CT: International Universities Press.

Barnard, K., Hammond, M.A., Booth, C.L., et. al. (1989). Measurement and meaning of parent-child interaction. In F. Morrison, C. Lord, & D. Keting, (Eds.), *Applied Developmental Psychology*, Vol. 3. New York: Academic Press.

Beckwith, L. (1976). Caregiver-infant interaction and the development of the high risk infant. In T.D. Tjossem (Ed.), *Intervention Strategies for High Risk Infants and Young Children*, pp 119-140. Baltimore: University Park Press.

Bell, S.M., & Ainsworth, M.D.S. (1972). Infant crying and maternal responsiveness. *Child Development*, 43, pp 1171-1190.

Bowlby, J. ((1969). *Attachment and Loss, Vol. 1 - Attachment.* New York: Basic Books.

Broffenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design.* Cambridge: Harvard Press.

Bromwich, R. (1981). *Working with Parents and Infants: An Interactional Approach.* Baltimore, MD: University Park Press.

Bruner, J. (1973). Organization of early skilled action. *Child Development*, 44, pp 1-11.

Carter, E., & McGoldrick, M. (1980). *The Family Life Cycle: A Framework for Family Theory.* New York: Gardner Press.

Crockenberg, S., & McClusky, K. (1986). Changes in maternal behavior during the baby's first year of life. *Child Development*, 57, pp 746-753.

Darling, R. (1989). Using the social system perspective in early intervention: The value of a sociological approach. *Journal of Early Intervention*, 13(1), pp 24-35.

Dunst, C.J., Trivette, C.M., & Deal, A.G. (1988). *Enabling and Empowering Families: Principles and Guidelines for Practice*. Cambridge, MA: Brookline.

Dunst, C.J. (1981). *Infant Learning: A Cognitive-Linguistic Intervention Strategy*. Allen, TX: DLM.

Emde, R.N. (1980). Emotional availability: A reciprocal reward system for infants and parents with implications for prevention of psychosocial disorders. In P.M. Taylor (Ed.), *Parent-Infant Relationships*, pp 87-115. New York: Grune & Stratton.

Fenson, L. (1986). The developmental progression of play. In A. Gottfried & C. Brown, (Eds.), *Play Interactions: The Contribution of Play Materials and Parental Involvement to Children's Development*. MA: DC Heath.

Greenspan, S. (1990). Comprehensive clinical approaches to infants and their families: Psychodynamic and developmental perspectives. In S. Meisels and J.P. Shonkoff (Eds.), *Handbook of Early Childhood Intervention*. Cambridge: Cambridge University Press.

Greenspan, S.I. (1981). *Psychopathology and Adaptation in Infancy and Early Childhood: Clinical Infants Reports, No. 1*. Hanover, NH: University Press of New England.

Hanson, M.J. & Lynch, E.W. (1992). Family diversity: Implications for policy and practice. *Topics in Early Childhood Education*, 12(3), pp 283-306.

Kaye, K. & Charney, R. (1980). How mothers maintain dialogue with two-year-olds. In D. Olson (Ed.), *The Social Foundations of Language and Thought: Essays in Honor of Jerome S. Bruner*. New York: Norton.

Kaye, K. & Charney, R. (1981). Conversational asymmetry between mothers and children. *Journal of Child Language*, 8, pp 35-39.

Kaye, K. (1982). *The Mental and Social Life of Babies: How Parents Create Persons*. Chicago, IL; University of Chicago Press.

Mahoney, G. & Powell, A. (1986). *The Transactional Intervention Program Teacher's Guide*. Rock Hill, SC: Center for Excellence in Early Childhood Education.

Mahoney, G., Robinson, C., Powell, A. (1992). Focusing on parent-child interaction: The bridge to developmentally appropriate practices. *Topics in Early Childhood Education*, 12(1), pp 105-120.

Mandler, J.M. (1983). Representation and retrieval in infancy. In M. Moscovitch (Ed.), *Infant Memory*. New York: Plenum.

Manolson, A. (1984). *It Takes Two To Talk: A Hanen Early Language Parent Guidebook*. Toronto: Hanen Early Language Resource Centre. In Musselwhite, C.R. (1986). *Adaptive Play for Special Needs Children*. San Diego, CA: College Hill Press.

Meisels, Samuel J. (1992). Early intervention: A matter of context. *Zero to Three*, February, 1992.

Musselwhite, C.R. (1986). *Adaptive Play for Special Needs Children*. San Diego, CA: College Hill Press.

Norris, J.A. (1991). Providing developmentally appropriate intervention to infants and young children with handicaps. *Topics in Early Childhood Special Education*, 11(1), pp pp 21-35.

Parmelee, A.H., & Haber, A. (1973). Who is the at-risk infant? *Clinical Obstetrics and Gynecology*, 16, pp 376-387.

Parmelee, A.H., & Sigman, M. (1984). Perinatal brain development and behavior. In J.J. Campas & M.M. Harth (Eds.), *Handbook of Child Psychology, Vol. 2, Infancy and Developmental Psychobiology*, pp 95-155. New York: Wiley.

Piaget, J. (1952). *The Origins of Intelligence in Children*. New York: W.W. Norton.

Rast, M.M. (1984). The use of play activities in therapy. *Developmental Disabilities Special Interest Section Newsletter*, 7 (3). In Musselwhite, C.R., (1986). *Adaptive Play for Special Needs Children*. San Diego, CA: College Hill Press.

Roggman, L.A. (1991). Assessing social interactions of mothers and infants through play. In C.E. Schaefer, K. Gitlin, and A.Sandgrund (Eds.), *Play Diagnosis and Assessment*, New York: NY: John Wiley & Sons.

Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M.W. Kent and J.E. Rolf (Eds.), *Primary Prevention of Psychopatholgy, Vol 3*, pp 49-74, Hanover, NY: University Press of New England.

Salisbury, C., Vincent, L., & Gorrafa, S. (1987). *Involvement in the Educational Process: Perceptions of Parents and Professionals of Dual Sensory Impaired Children*. Unpublished manuscript, State University of New York: Binghampton

Sameroff, A. J. & Chandler, M. (1975). Reproductive risk and the continuum of caretaking casualty. In F. Horowitz, M. Hetherington, S. Scarr-Salapatek, et al. (Eds), *Review of Child Development Research, Vol 4*, pp. 187-244. Chicago: University of Chicago Press.

Sameroff, A.J. & Fiese, B.H. (1990). Transactional regulation and early intervention. In S. J. Meisels and J. P. Shonkoff (Eds.), *Handbook of Early Childhood Intervention*, MA:Cambridge University Press.

Sameroff, A.J., Seifer, R., Barocas, B., Zax, M., & Greenspan, S. (1987). IQ scores of four-year-old children: Social environmental risk factors. *Pediatrics*, 79(3), pp 343-350.

Siders, J., Riall, A., Campbell, R., Crow, R.E. (1987). Gulfcoast early intervention conference: Overview. *Topics in Early Childhood Special Education*, 7, pp 1-5.

Slade, (1987). A longitudinal study of material involvement and symbolic play during the toddler period. *Child Development*, 58, pp 367-375.

Sroufe, L.A., & Fleeson, J. (1986). Attachment and the construction of relationships. In W. Hartup & Z. Rubin (Eds), *The Nature and Development of Relationships*, pp 51-71. Hillsdale, NJ: L. Erlbaum

Sroufe, L.A., & Waters, E. (1977). Attachment as an organizational construct. *Child Development*, 48, pp 1184-1190.

Strain, P. (1987). Comprehensive evaluation of intervention of young autistic children. *Topics in Early Childhood Special Education* 7, pp 97-110.

Trevarthen, C. (1988). Universal cooperative motives: How infants begin to know the language and culture of their parents. In Jahoda, G. & Lewis, I.M. (Eds.), *Acquiring Culture: Cross Cultural Studies in Child Development*. New York: Croom Helm.

Turnbull, A. & Turnbull, H. (1986). *Families, Professionals and Exceptionality - A Special Partnership*. Columbus, OH: Merrill.

Turnbull, A.P. & Turnbull, H.R. (1985). Stepping back from early intervention: An ethical perspective. *Journal of the Division for Early Childhood*, 10, pp 106-117.

Turnbull, A.P. & Turnbull, H.R. (1990). Exchanging information with families. In A. Turnbull and H. Turnbull, *Families, Professionals, and Exceptionality-A Special Partnership*, 2nd Edition. Columbus, OH: Merrill Publishing.

Vincent, L.J., Salisbury, C.L., Strain, P., McCormick, C., & Tessier, A. (1990). A behavioral ecological approach to early intervention: Focus on cultural diversity. In S.J. Meisels and J.P. Shonkoff (Eds.), *Handbook of Early Childhood Intervention*, MA: Cambridge University Press.

Vygotsky, L.S. (1967). Play and its role in the mental development of the child. *Soviet Psychology* 5, pp 6-18.

Vygotsky, L.S. (1978). *Mind in Society: The Development of the Higher Psychological Processes.* Cambridge, MA: Harvard University Press.

Watson, J.S., (1972). Smiling, cooing and "the game." *Merrill-Palmer Quarterly,* 18, pp 341-347.

Watson, J.S., & Ramey, C.T., (1972). Reactions to response contingent stimulation in early infancy. *Merrill-Palmer Quarterly,* 18, pp 219-228.

Westby, C.E., (1991). A scale for assessing children's pretend play. In *Play Diagnosis and Assessment,* chapter 6, pp. 131-163. John Wiley and Sons, New York.

Yarrow, L.J. (1981). Beyond cognition: The development of mastery motivation. *Zero to Three,*1(3), pp 1-5.

Yarrow, L.J., Rubenstein, J.L. & Pederson, F.A. (1975). *Infant and Environment: Early Cognitive and Motivational Development.* New York: Wiley.

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